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REMARKS

Entry of the foregoing and reconsideration of the application identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.114 and in light of the remarks which follow, are respectfully requested.

By the above amendments, claim 1 has been amended for clarification purposes, and now recites adjusting at least one process parameter based on the electrical resistance measurement to maintain the viscosity and surface tension of the molten glass within predetermined ranges or at predetermined levels. Claim 1 has also been amended to recite forming a glass fiber from the molten glass. Support for such amendments can be found at least from page 4, line 34 to page 5, line 11, taken in connection with page 3, lines 1-5. Claim 9 has been amended for clarification purposes. Entry of the foregoing amendments is proper at least because a Request for Continued Examination is being filed herewith. See 37 C.F.R. §1.114.

In the Official Action, claims 1-3, 5 and 8-16 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 3,278,844 (*Bell et al*) in view of U.S. Patent No. 1,144,776 (*Northrup*). Claim 6 and 7 stand rejected under 35 U.S.C. §103(a) as being obvious over *Bell et al*, and further in view of U.S. Patent No. 4,780,120 (*Varrasso et al*). Withdrawal of the above rejections is respectfully requested for at least the following reasons.

Independent claim 1 is directed to a method for controlling at least one process parameter while processing a molten glass, comprising: measuring an electrical resistance of the molten glass with at least one sensor comprising an inner tube connected to a first electrode and an outer tube connected to a second electrode, to obtain an electrical resistance measurement; adjusting at least one process parameter based on the electrical resistance measurement to maintain the viscosity and surface tension of the molten glass within

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predetermined ranges or at predetermined levels; and forming a glass fiber from the molten glass.

Bell et al does not disclose or suggest each feature recited in independent claim 1. For example, *Bell et al* does not disclose or suggest a method for controlling at least one process parameter while processing a molten glass, comprising adjusting at least one process parameter based on the electrical resistance measurement to maintain the viscosity and surface tension of the molten glass within predetermined ranges or at predetermined levels. *Bell et al* discloses that for certain glass compositions, variations in resistivity are indicative of changes in viscosity and may therefore be utilized in controlling variation of gob size (col. 1, lines 28-31). However, *Bell et al* has no disclosure or suggestion of adjusting at least one process parameter to maintain the viscosity and surface tension of the molten glass within predetermined ranges or at predetermined levels, as now recited in claim 1. Nor does *Bell et al* disclose or suggest the formation of a glass fiber from the molten glass, as recited in claim 1.

In this regard, Applicant respectfully notes that in the manufacture of glass fibers, it is generally desirable to reduce the occurrence of unwanted glass fiber breakage during the drawing of such fibers from fiberizing bushings (specification at page 5). Applicant has discovered that such fiber breakage can be attributed to both the viscosity and surface tension of the molten glass introduced to the bushings. Exemplary aspects of the presently claimed methods provide a means for maintaining the viscosity and surface tension of the molten glass within a predetermined range or at a predetermined level which is effective to reduce or eliminate unwanted fiber breakage. The applied art fails to provide any recognition or suggestion of such features or advantages.

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Northrup and *Varrasso et al* fail to cure the above-described deficiencies of independent claim 1. In this regard, the Patent Office has relied on *Northrup* for disclosing an apparatus for measuring temperature and resistivity particularly of a molten material (Official Action at page 4). *Varrasso et al* has been relied on for disclosing a glass fiber forming bushing which is filled with molten glass. However, like *Bell et al*, the secondary applied art does not disclose or suggest adjusting at least one process parameter based on the electrical resistance measurement to maintain the viscosity and surface tension of the molten glass within predetermined ranges or at predetermined levels, as recited in claim 1. As discussed above, fluctuations in the viscosity and surface tension of the molten glass can contribute to fiber breakage, and maintaining the viscosity and surface tension of the molten glass within predetermined ranges or levels can provide the unexpected advantage of reducing or eliminating unwanted fiber breakage. The secondary applied art has no recognition of such advantages resulting from adjusting at least one process parameter based on the electrical resistance measurement to maintain the viscosity and surface tension of the molten glass within predetermined ranges or levels.

In view of the above, it is respectfully submitted that the above applied documents, taken either alone or in combination, fail to disclose or suggest each feature recited in independent claim 1. Accordingly, withdrawal of the above §103(a) rejections is respectfully requested.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited. If there are any

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questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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